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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/600,973

06/20/2003

Stephan K. Barsun

200209065-1

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10/06/2004

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EXAMINER

VU, PHUONG T

ART UNIT

PAPER NUMBER

2841

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/600,973

Applicant(s)

BARSUN ET AL.

Examiner

Phuong T. Vu

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-14, 16-37, 39 is/are rejected.
- 7) ☒ Claim(s) 11, 15 and 38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20 June 2003.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Independent claim 1 appears to be misdescriptive and inconsistent with the specification and drawings when combined with the dependent claims. It appears that claim 1 should reflect that the link is coupled to the first printed circuit assembly in order to be consistent with the dependent claims. The rejection below is based on the assumption that the link is coupled to the first printed circuit board, not the system component.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3,6-7,9-10,12,14,16-18, 20-22,24-28,30-37,39 are rejected under 35 U.S.C. 102(b) as being anticipated by Roy (US 6,147,872). Regarding claim 1, the reference discloses an electronic system comprising a chassis 10, a system component 12 coupled to the chassis and having a first connector 22, a first printed circuit board assembly 14 having a second connector 24 and a link member 62 coupled to the

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system component and slidably coupled to the pivoting member 54, wherein pivoting of the pivoting member in a first direction moves the second connector into connection with the first connector and wherein pivoting of the pivoting member in a second direction moves the second connector out of connection with the first connector.

Regarding claim 2, at least one guide member 18 is in slidable engagement with the first printed circuit assembly, wherein the at least one guide member is configured to guide movement of the first printed circuit assembly towards the system component.

Regarding claim 7, the link extends opposite the first connector.

Regarding claim 3, the at least one guide member includes at least one guide pin 92 in slidable engagement with the first printed circuit assembly.

Regarding claim 6, a stiffener 44b is coupled to the first printed circuit assembly between the first printed circuit assembly and the link.

Regarding claim 7, the link extends opposite the first connector.

Regarding claim 9, the pivoting member includes a channel 64 and the link includes a head portion 62a slidably received within the channel.

Regarding claim 10, the system component comprises a second printed circuit assembly having the second connector.

Regarding claim 12, the first printed circuit assembly includes a first printed circuit board and necessarily a first plurality of component affixed to the first printed circuit board, wherein the first plurality of components extend in a direction away from the second printed circuit assembly.

Regarding claim 14, a spring 98 is coupled between the first printed circuit assembly and the chassis.

Regarding claim 16, a stop surface 18b is configured to engage the first printed circuit assembly to limit movement of the first printed circuit assembly toward the system component.

Regarding claim 17, the pivot member pivots about a horizontal axis.

Regarding claim 18, the reference discloses an electronic subsystem having a chassis 10, a system component 12 coupled to the chassis, and having a first connector 22 and a pivoting member 54 pivotally coupled to the chassis, the electronic subsystem comprising a first printed circuit board assembly 14 having a second connector 24 and a link member 62 coupled to the first printed circuit assembly and adapted to be slidably coupled to the pivoting member such that the link slides relative to the pivoting member as the pivoting member is pivoted to move the second connector between a connected state in which the second connector is connected to the first connector and a disconnected state.

Regarding claim 20, the system component comprises a second printed circuit assembly and wherein the first printed circuit assembly is configured to be slidably supported relative to the second printed circuit assembly

Regarding claim 21, a stiffener 44b is coupled to the first printed circuit assembly between the first printed circuit assembly and the link.

Regarding claim 22, the stiffener extends opposite the first connector.

Regarding claim 24, the reference discloses an electronic system for use with an electronic subsystem having a first printed circuit board assembly 14 with a first connector 24, and a link 62 extending from the first printed circuit board assembly the electronic system comprising a chassis 10, a system component 12 having a second connector 22 coupled to the chassis, and a pivoting member 54 pivotally coupled to the chassis, where in the pivoting member is configured to slidably engage the link during pivoting to move the first connector into connection with the second connector between a connected state and a disconnected state.

Regarding claim 25, the system component comprises a second printed circuit assembly having the second connector.

Regarding claim 26, at least one guide member 18 is configured to guide movement of the first printed circuit assembly.

Regarding claim 27, at least one stop surface 18b is configured to engage the first printed circuit assembly to limit movement of the first printed circuit assembly towards the system component.

Regarding claim 28, a spring 98 is coupled to the chassis and configured to engage the first printed circuit assembly.

Regarding claim 30, the pivoting member pivots about a horizontal axis.

Regarding claim 31, the reference discloses an electronic system comprising a chassis 10m a first system component 12 having a first connector 22 coupled to the chassis, a pivot member 54 coupled to the chassis, a second system component 14 having a second connector 24 configured to mate with the first connector, and a link 62

coupled to the second system component and slidably coupled to the pivoting member, wherein pivotal movement of the pivoting member moves the first connector and the second connector between a connected state and a disconnected state.

Regarding claim 32, the second system component comprises a printed circuit assembly having the second connector.

Regarding method claims 33-37, 39, one would perform the recited method steps in the insertion and removal of the system component in the electronic system rejected above.

5. Claims 1-5,7-8,10,12-14, 16-20, 23,24-37,39 are rejected under 35 U.S.C. 102(b) as being anticipated by Joo (US 6,113,402). Regarding claim 1, the reference discloses an electronic system comprising a chassis 14, a system component coupled to the chassis and having a first connector 70', a first printed circuit board assembly 24 having a second connector 70 and a link member 48 coupled to the system component and slidably coupled to the pivoting member 64, wherein pivoting of the pivoting member in a first direction moves the second connector into connection with the first connector and wherein pivoting of the pivoting member in a second direction moves the second connector out of connection with the first connector.

Regarding claim 2, at least one guide member 42 is in slidable engagement with the first printed circuit assembly, wherein the at least one guide member is configured to guide movement of the first printed circuit assembly towards the system component.

Regarding claim 7, the link extends opposite the first connector.

Regarding claim 3, the at least one guide member includes at least one guide pin 26 in slidable engagement with the first printed circuit assembly.

Regarding claim 4, the link is releasably coupled to the pivoting member.

Regarding claim 5, the link has an upper end configured as a handle for the first printed circuit assembly.

Regarding claim 7, the link extends opposite the first connector.

Regarding claim 8, the first printed circuit assembly has a center of mass and wherein the link is coupled to the first printed circuit assembly at the center of mass.

Regarding claim 10, the system component comprises a second printed circuit assembly having the second connector.

Regarding claim 12, the first printed circuit assembly includes a first printed circuit board and necessarily a first plurality of component affixed to the first printed circuit board, wherein the first plurality of components extend in a direction away from the second printed circuit assembly.

Regarding claim 13, the second printed circuit assembly includes a second printed circuit board and second plurality of components and wherein the second plurality of components extends away from the first printed circuit assembly.

Regarding claim 14, a spring 50 is coupled between the first printed circuit assembly and the chassis.

Regarding claim 16, a stop surface 18b is configured to engage the first printed circuit assembly to limit movement of the first printed circuit assembly toward the system component.



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Regarding claim 17, the pivot member pivots about a horizontal axis.

Regarding claims 18-20, 23, 24-37, 39 please refer to the above rejection.

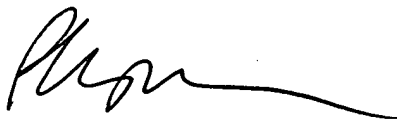
***Allowable Subject Matter***

6. Claims 11,15,38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong T. Vu whose telephone number is (571) 272-2111. The examiner can normally be reached on Mon. & Tues., 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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